

Vivekanand College, Kolhapur (Empowered Autonomous)
Department of Botany
Annual Teaching Plan

Academic Year: **2024-2025**

Name of the teacher: **Dr. Bhaurav Tukaram Dangat**


Programme: **B. Sc. III**

Semester: **V**

Subject: **Botany**

Course Title: "Biochemistry and Stress Physiology & Plants Systematics and Paleobotany"

Month: July			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Section II: Unit II: System of Classification.	Phylogeny of Angiosperms, The general account of origin of Angiosperms (with reference to Gnetalean theory)
04	04	08		
Month: August			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit II: System of Classification.	Classification system of Takhtajan, Brief reference of Angiosperm Phylogeny Group (APG-III) classification (2009).
04	04	05		
Month: September			Module/Unit:	Sub-units planned
04	04	08	Unit II: System of Classification. Unit IV: Paleobotany.	Ranks of IUCN and methods of Conservation. General account types of fossils, Geological time scale.
Month: October			Module/Unit:	Sub-units planned
04	--	04	Unit IV: Paleobotany	Study of following form genera with reference to systematic position, external morphology and affinities – Lyginopteris and Enigmocarpon 4c: Applications of Paleobotany- Role of microfossils in oil and coal exploration.

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Vivekanand College, Kolhapur (Autonomous)
Department of Botany
Annual Teaching Plan

Academic Year: **2024-2025**

Name of the teacher: **Dr. Bhaurav Tukaram Dangat**

Programme: **B. Sc. I**

Semester: **I**

Subject: **Botany**

Course Title: **"Plant Morphology"**

Month: August			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	Unit I: General organization of plant body:	Root system – Introduction, types and modification of Shoot system - Introduction and modification of stem
04	04	08		
Month: September			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	Unit I: General organization of plant body:	Leaf – Introduction, Types- Simple and Complex, Phyllotaxy, Leaf venation, Modification
04	04	08		
Month: October			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	Unit II: Study of Inflorescence	Definition and characters, types of inflorescence and significance of inflorescence.
05	04	09		

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Vivekanand College, Kolhapur (Empowered Autonomous)
Department of Botany
Annual Teaching Plan

Academic Year: **2023-2024**

Name of the teacher: **Dr. Bhaurav Tukaram Dangat**


Programme: **B. Sc. II**

Semester: **III**

Subject: **Botany (Minor)**

Course Title: **"MIN03BOT32: "Plant Taxonomy"**

Month: July			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	Unit-2: Botanical Nomenclature	Principles and rules (ICN), Salient features of International Code of Botanical Nomenclature (ICBN),
04	04	08		
Month: August			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	Unit-2: Botanical Nomenclature	Rules and regulations of Binomial nomenclature System, Systems of Classification-Natural, Artificial and Phylogenetic
04	04	08		
Month: September			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	Unit-2: Botanical Nomenclature	Bentham and Hooter's system of Classification (Up to series).
04	04	08		

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Department of Botany
Annual Teaching Plan

Academic Year: **2024-2025**

Name of the teacher: **Dr. Bhaurav Tukaram Dangat**

Programme: **B. Sc. II**

Semester: **III**

Subject: **Botany (Major)**

Course Title: **"DSC03BOT32: "Diversity of Phanerogams"**

Month: July			Module/Unit:	Sub-units Planned
Lectures	Practical's	Total	Unit- 3: Angiosperms	Introduction, Habit and Habitat diversity, Methods of reproduction
04	04	08		
Month: August			Module/Unit:	Sub-units Planned
Lectures	Practical's	Total	Unit- 3: Angiosperms	Evolutionary history, Taxonomic hierarchy, Bentham and Hooker System of Classification (Merit and Demerit),
04	04	08		
Month: September			Module/Unit:	Sub-units Planned
Lectures	Practical's	Total	Unit- 3: Angiosperms	Difference between Dicot and Monocot plant,
04	04	08		
Month: October			Module/Unit:	Sub-units Planned
Lectures	Practical's	Total	Unit- 3: Angiosperms	Study of Sunflower and Maize root and stem.
02	-	02		

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Department of Botany
Annual Teaching Plan

Academic Year: 2024-2025

Name of the teacher: **Dr. Bhaurav Tukaram Dangat**

Programme: **B. Sc. I**

Semester: **I**

Subject: **Botany**

Course Title: **"Plant Morphology"**

Month: August			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	Unit I: General organization of plant body:	Root system – Introduction, types and modification of Shoot system - Introduction and modification of stem
04	04	08		
Month: September			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	Unit I: General organization of plant body:	Leaf – Introduction, Types- Simple and Complex, Phyllotaxy, Leaf venation, Modification
04	04	08		
Month: October			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	Unit II: Study of Inflorescence	Definition and characters, types of inflorescence and significance of inflorescence.
05	04	09		

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Vivekanand College, Kolhapur. (Empowered Autonomous)
Department of Botany
Annual Teaching Plan

Academic Year: 2024-2025

Name of the teacher: **Dr. Abhijeet Rajaram Kasarkar**


Programme: **B. Sc. I**

Semester: **I**


Subject: **Botany**

Course Title: **"Plant Morphology"**

Month: July			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit III: Study of Flower	3a. Definition and parts of a typical flower 3b. Symmetry and insertion of floral whorls.
04	00	04		
Month: August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit III: Study of Flower Practical I	3c. Calyx and Corolla 3d. Perianth - types
04	04	08		
Month: September			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit III: Study of Flower Practical I	3e. Androecium- parts and types 3f. Gynoecium –parts, arrangement and types of placentation.
04	04	08		
Month: October			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit IV: Study of Fruit Practical I	4a. Introduction and types with one example each.
04	04	08		


 (Dr. A. R. Kasarkar)
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Vivekanand College, Kolhapur. (Empowered Autonomous)
Department of Botany
Annual Teaching Plan

Academic Year: **2024-2025**

Name of the teacher: **Dr. Abhijeet Rajaram Kasarkar**

Programme: **B. Sc. II**

Semester: **III**

Subject: **Botany (DSC03BOT32)**

Course Title: "**Diversity of Phanerogams**"

Month: August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit I: Phanerogams Practical I	1. Introduction, Distinguishing characters of Gymnosperms and Angiosperms.
04	02	06		
Month: September			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit IV: Taxonomic Importance Practical I	4. Morphology, Anatomy, Chemotaxonomy and Palynology. Cytotaxonomy, Chemotaxonomy, Numerical Taxonomy.
04	04	08		
Month: October			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit IV: Taxonomic Importance Practical I	4. Molecular taxonomy and DNA barcoding of plants. Herbaria, Herbarium technique and Digital herbaria.
03	03	06		

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(Dr. A. R. Kasarkar)
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Annual Teaching Plan

Academic Year: 2024-2025

Name of the teacher: Dr. Abhijeet Rajaram Kasarkar

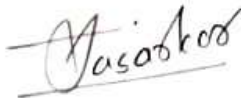
Programme: B. Sc. II

Semester: III


Subject: Botany (MIN03BOT32)

Course Title: "Plant Taxonomy"

Month: August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit IV: Taxonomic Literature Practical I	4. Flora, Manuals, Monographs, eflora, Revisions, Journals.
04	02	06		
Month: September			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit IV: Taxonomic Literature Practical I	4. Periodicals, Reference Books, Research paper, Websites and Catalogues.
04	04	08		
Month: October			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit IV: Taxonomic Literature Practical I	4. Plant Families : Malvaceae and Amaryllidaceae
03	03	06		


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Academic Year: 2024-2025

Name of the teacher: Dr. Abhijeet Rajaram Kasarkar

Programme: B. Sc. II

Semester: III

Subject: Botany (MIN03BOT32)

Course Title: "Plant Taxonomy"

Month: August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit IV: Taxonomic Literature Practical I	4. Flora, Manuals, Monographs, eflora, Revisions, Journals.
04	02	06		
Month: September			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit IV: Taxonomic Literature Practical I	4. Periodicals, Reference Books, Research paper, Websites and Catalogues.
04	04	08		
Month: October			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit IV: Taxonomic Literature Practical I	4. Plant Families : Malvaceae and Amaryllidaceae
03	03	06		

(Signature)

(Dr. A. R. Kasarkar)
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(Signature)
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Academic Year: 2024-2025

Name of the teacher: Dr. Abhijeet Rajaram Kasarkar


Programme: B. Sc. III

Semester: V

Subject: Botany

Course Title: "Plant Pathology and Biofertilizers" and "Plant Systematics and Paleobotany"

Month: August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Section : II Unit III: Plant Families Practical II	3a. Study of plant families : Anacardiaceae, Fabaceae ,Apiaceae, Rubiaceae
04	04	08		
Month: September			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit III: Plant Families Unit IV : Biofertilizer Practical II	3a. Study of plant families : Achanthaceae, Euphorbiaceae and Poaceae 4a. Microbes in Agriculture
04	04	08		
Month: October			Module/Unit:	Sub-units planned
04	04	08	Unit IV : Biofertilizer Practical II	4b. Organic Farming


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Vivekanand College, Kolhapur (Empowered Autonomous)
Department of Botany
Annual Teaching Plan

Academic Year: **2024-2025**

Name of the teacher: **Dr. Sarika Deepak Patil.**


Programme: **B. Sc. I**

Semester: **I**

Subject: **Botany**

Course Title: "Indian Knowledge System" IKS: IKS03GEC11

Month: August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit-1: Introduction to Ayurveda	1a. Ayurvedic medicinal system 1b. Principles of Ayurveda (Vata, Pitta, Kapha)
03	00	03		
Month: September			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit-1: Introduction to Ayurveda.	1c. Ayurvedic therapies 1d. Unani system of medicine 1e. Siddha system of medicine
04	00	04		
Month: October			Module/Unit:	Sub-units planned
03	00	03	Unit-1: Introduction to Ayurveda.	1f. Future of herbal drugs 1g. Study of medicinal plants- Punarnava, Vasaka, Shatavar, Brahmi and Arjuna
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Academic Year: 2024-2025

Name of the teacher: **Dr. Sarika Deepak Patil.**


Programme: **B. Sc. I**

Semester: **I**

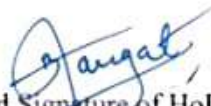
Subject: **Botany**

Course Title: "DSC BOT- PR-I : 2DSC03BOT29: DSC"

Month: August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Practicals -I	1) Study of Microscope and its parts. 2) Study of Nostoc. 3) Study of Mucor
--	02	--		
Month: September			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Practicals -I	4) Study of Moss. 5) Study of Pteris. 6) Study of Cycas. 7) Study of Hibiscus.
--	04	--		
Month: October			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Practicals -I	8) Study of different types of tissue – Simple and Complex. 9) Study of types of seed – Dicot and Monocot.
--	04	--		


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Vivekanand College, Kolhapur (Empowered Autonomous)
Department of Botany
Annual Teaching Plan

Academic Year: **2024-2025**

Name of the teacher: **Dr. Sarika Deepak Patil.**

Programme: **B. Sc. II**

Semester: **III**

Subject: **Botany (Minor)**

Course Title: **"MIN03BOT31: Diversity in non-flowering plant"**

Month: July			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit -3: Bryophyta:	Introduction, Distribution in India, Range of Thallus organization,
02	05	07		
Month: August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit -3: Bryophyta	Methods of reproduction Outline classification according to Parihar (1965),
03	06	09		
Month: September			Module/Unit:	Sub-units planned
03	06	09	Unit -3: Bryophyta	Study of example with reference to occurrence, plant body and life cycle of <i>Riccia</i> and <i>Anthoceros</i> .


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Vivekanand College, Kolhapur (Empowered Autonomous)
Department of Botany
Annual Teaching Plan

Academic Year: 2024-2025

Name of the teacher: Dr. Sarika Deepak Patil.


Programme: B. Sc. II

Semester: III

Subject: Botany (Major)

Course Title: "DSC03BOT31: Diversity of Cryptogams"

Month: July			Module/Unit:	Sub-units Planned
Lectures	Practicals	Total	Unit -3: Bryophyta	Introduction, Distribution in India, Range of Thallus organization.
02	00	02		
Month: August			Module/Unit:	Sub-units Planned
Lectures	Practicals	Total	Unit -3: Bryophyta	Methods of reproduction, Outline classification according to Parihar (1965).
03	00	03		
Month: September			Module/Unit:	Sub-units Planned
Lectures	Practicals	Total	Unit -3: Bryophyta	Study of example with reference to occurrence, plant body and life cycle of <i>Riccia</i> and <i>Anthoceros</i> .
03	00	03		


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Vivekanand College, Kolhapur (Empowered Autonomous)

Department of Botany

Annual Teaching Plan

Academic Year: 2024-2025

Name of the teacher: Dr. Sarika Deepak Patil

Programme: B. Sc. III

Semester: V


Subject: Botany

Course Title: "Paper - V "Biochemistry and Stress Physiology & Plants Systematics and Pale botany" (DSE - 1007 E3) Section I: Biochemistry and Stress Physiology"


Month: July			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit:1 Plant Biochemistry.- Carbohydrate metabolism and Practical: I (DSE7E1) Section: I Section: II Cytology and Research Techniques in Life Sciences Microbiology, Plant Pathology and Bio fertilizers	1a: Introduction and classification of Carbohydrates
02	00	07		1b: Properties of Monosaccharide,
Month: August			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit:1 Plant Biochemistry.- Carbohydrate metabolism and Practical: I (DSE7E1) Section: I Section: II Cytology and Research Techniques in Life Sciences Microbiology, Plant Pathology and Bio fertilizers	Oligosaccharides, Polysaccharides. 1c: Significance of Carbohydrate Protein metabolism.
05	04	10		
Month: September			Module/Unit:	Sub-units planned
06	04	12	Unit:1 Plant Biochemistry.- Carbohydrate metabolism and Practical: I (DSE7E1) Section: I Section: II Cytology and Research Techniques in Life Sciences Microbiology, Plant Pathology and Bio fertilizers	1d: Introduction, properties and characters of amino acids



Month: October			Module/Unit:	Sub-units planned
03	06	09	Unit: I Plant Biochemistry- Carbohydrate metabolism and Practical: I (DSE7E1) Section: I Section: II Cytology and Research Techniques in Life Sciences Microbiology, Plant Pathology and Bio fertilizers	1e: Protein-structure and classification 1f: Protein synthesis


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Department of Botany
Annual Teaching Plan

Academic Year: 2024-2025

Name of the teacher: Dr. Annapurna Ram Alvikar

Programme: B. Sc. III

Semester: V

Subject: Botany

Course Title: "Plant Biochemistry and Stress Physiology"

Month : July			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Paper: DSE 7 E2 Section I : Unit 3 – Stress Physiology	3a: Introduction and Defining plant stress, Water stress
02	--	02		
Month : August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Paper: DSE 7 E2 Section I : Unit 3 – Stress Physiology	3b: Temperature stress, Salinity stress 3c: Stress sensing mechanism
05	--	05		
Month : September			Module/Unit:	Sub-units planned
06	--	06	Paper: DSE 7 E2 Section I : Unit 4 – Senescence and Aging	4a: Introduction, Patterns of senescence 4b: Physical changes during senescence. 4c: Control of senescence
			Paper: DSE 7 E2 Section II : Unit 1 – Importance of Plant Systematics	1a. Introduction to systematics
Month : October			Module/Unit:	Sub-units planned
04	--	04	Paper: DSE 7 E2 Section II : Unit 1 – Importance of Plant Systematics	1a: Evidences from Palenology, Cytology Phytochemistry and Molecular data

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Vivekanand College, Kolhapur (Empowered Autonomous)
 Department of Botany
Annual Teaching Plan

Academic Year: **2024-2025**

Name of the teacher: **Dr. Annapurna Ram Alvikar**

Programme: **B. Sc. II (Major)**

Semester: **III**

Subject: **Botany**

Course Title: **"Diversity of Cryptogams"**

Month : July			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	DSC03BOT31 Unit 4 : Pteridophytes	4a. Introduction, Distribution in India
02	00	02		
Month : August			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	DSC03BOT31 Unit 4 : Pteridophytes	4b. Methods of reproduction, Outline of classification according to Smith, Occurance , Plant body and life cycle of <i>Selaginella</i>
04	00	04		
Month : September			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	DSC03BOT31 Unit 4 : Pteridophytes	Occurance , Plant body and life cycle of <i>Azolla</i> Heterospory.
04	00	04		
			DSC03BOT32 "Diversity of Phanerogams" Unit 4 : Taxonomic Importance	Molecular taxonomy and DNA Barcoding of plants.
Month : October			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	DSC03BOT32 "Diversity of Phanerogams" Unit 4 : Taxonomic Importance	Herbarium technique and Digital herbaria.
04	00	04		

Name and Signature of Teacher
 (Dr. Annapurna. R. Alvikar)



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Vivekanand College, Kolhapur (Empowered Autonomous)

Department of Botany
Annual Teaching Plan

Academic Year: 2024-2025

Name of the teacher: **Dr. Annapurna R. Alvikar**

Programme: **B. Sc. II (Minor)**

Semester: **III**

Subject: **Botany**

Course Title: **"Diversity in Non-flowering plant"**

Month : July			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	MIN03BOT31 Unit 4 : Pteridophytes	4a. Introduction, Distribution in India
02	00	02		
Month : August			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	MIN03BOT31 Unit 4 : Pteridophytes	Methods of reproduction, Outline of classification according to Smith, Occurance , Plant body of <i>Selaginella</i>
04	02	06		
Month : September			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	MIN03BOT31 Unit 4 : Pteridophytes	life cycle of <i>Selaginella</i> . Occurance , Plant body and life cycle of <i>Azolla</i>
04	04	08		
Month : October			Module/Unit:	Sub-units planned
Lectures	Practical's	Total	MIN03BOT31 Unit 4 : Pteridophytes	Occurance , Plant body and life cycle of <i>Azolla</i> . Heterosporry
04	04	08		

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(Dr. Annapurna. R. Alvikar)



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Vivekanand College, Kolhapur (Empowered Autonomous)
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 Annual Teaching Plan

Academic Year: **2024-2025**

Name of the teacher: **Dr. Annapurna Ram Alvikar**

Programme: **B. Sc. I**

Semester: **I**

Subject: **Botany**

Course Title: **Practical's**

Month : July			Module/Unit:	Sub-units planned
Lectures	Practical's	Total		
--	02	02	--	--
Month : August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total		
--	04	04	--	--
Month : September			Module/Unit:	Sub-units planned
--	04	04	--	--
Month : October			Module/Unit:	Sub-units planned
--	04	04	--	--

Name and Signature of Teacher
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Annual Teaching Plan

Academic Year: 2024-2025

Name of the teacher: **Dr. Priya Digambar Patil**

Programme: **B. Sc. III**

Semester: **V**

Subject: **Botany**

Course Title: **"Cytology and Research Techniques in life sciences and Microbiology, Plant Pathology and Biofertilizers"**

Month: July			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Section I: Unit II: Cell Organelles	Introduction, Eukaryotic cell components-Nucleus
02	--	05		
Month: August			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit II: Cell Organelles	Eukaryotic cell components- Endoplasmic reticulum, Golgi complex Glyoxisomes, Peroxisomes and Lysosomes- Structure, composition and functions Specialized cell organelle- Ribosome
05	--	05		
Month: September			Module/Unit:	Sub-units planned
06	--	06	Section I: Unit 4: Radiation Biology	Radioactive isotopes, Introduction & examples Effect of radiations on Biological systems Beneficial effects of radiations



Month: October			Module/Unit:	Sub-units planned
03	--	03	Section I: Unit 4: Radiation Biology	Autoradiography Technique Geiger-Muller Experiment / Liquid Scintillation Counter Precautionary measures

Priya D. Patil

Name and Signature of Teacher

(Dr. Priya D. Patil)



B. Jangal

Name and Signature of HoD

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DEPARTMENT OF BOTANY
VIVEKANAND COLLEGE, KOLHAPUR
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Vivekanand College, Kolhapur (Empowered Autonomous)
Department of Botany
Annual Teaching Plan

Academic Year: **2023-2024**

Name of the teacher: **Dr. Priya Digambar Patil**

Programme: **B. Sc. II**

Semester: **III**

Subject: **Botany (Major)**

Course Title: **"DSC03BOT31: Diversity of Cryptogams"**

Month: July			Module/Unit:	Sub-units Planned
Lectures	Practicals	Total	Unit I: Algae	Cryptogams: Introduction, General Characters Algae: Introduction
03	-	03		
Month: August			Module/Unit:	Sub-units Planned
Lectures	Practicals	Total	Unit I: Algae	Range of Thallus organization Modes of reproduction Classification of Algae (G. M. Smith)
05	-	05		
Month: September			Module/Unit:	Sub-units Planned
05	-	05	Unit I: Algae	Study of example with reference to occurrence, plant body and life cycle of <i>Spirogyra</i> and <i>Sargassum</i> Economic importance of Algae
Month: October			Module/Unit:	Sub-units Planned
02	-	02	Unit: I Gymnosperms	<i>Pinus</i> : Occurrence, habitat, vegetative structure, reproduction and Life cycle

Name and Signature of Teacher

(Dr. Priya D. Patil)



Name and Signature of HoD

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Vivekanand College, Kolhapur (Empowered Autonomous)
Department of Botany
Annual Teaching Plan

Academic Year: 2023-2024

Name of the teacher: **Dr. Priya Digambar Patil**


Programme: **B. Sc. II**

Semester: **III**

Subject: **Botany (Minor)**

Course Title: **"MIN03BOT31: Diversity in non-flowering plant"**

Month: July			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Section II: Unit I: Algae	Cryptogams: Introduction, General Characters Algae: Introduction
03	04	07		
Month: August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit I: Algae	Range of Thallus organization Modes of reproduction Classification of Algae (G. M. Smith)
05	06	11		
Month: September			Module/Unit:	Sub-units planned
05	06	11	Unit I: Algae	Study of example with reference to occurrence, plant body and life cycle of <i>Spirogyra</i> and <i>Sargassum</i> Economic importance of Algae


 Name and Signature of Teacher
 (Dr. Priya D. Patil)




 Name and Signature of HoD
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Vivekanand College, Kolhapur (Autonomous)
Department of Botany
Annual Teaching Plan

Academic Year: 2024-2025

Name of the teacher: **Dr. Priya Digambar Patil**

Programme: **B. Sc. I**

Semester: **I**

Subject: **Botany**

Course Title: **"Basics in Botany"**

Month: August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit II: General outline of plant kingdom	Study of characters of plant kingdom
03	04	07		Study of classification of plant kingdom
Month: September			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit II: General outline of plant kingdom	Study of five divisions with respect to characters and economic importance
04	06	10		
Month: October			Module/Unit:	Sub-units planned
05	06	11	Unit IV: Organization of higher plant body	Plant organs (Root, Stem and Leaf)
	--			Development of plant body Internal organization
				Study of tissue systems- Meristematic tissue, simple and complex tissue

Name and Signature of Teacher

(**Dr. Priya D. Patil**)



Name and Signature of HoD

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Vivekanand College, Kolhapur (Autonomous)
Department of Botany
Annual Teaching Plan

Academic Year: 2024-2025

Name of the teacher: **Dr. Priya Digambar Patil**

Programme: **B. Sc. I**

Semester: **I**

Subject: **Botany**

Course Title: **"OEC03LFS11: Herbal Cosmetics-I"**

Month: August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	--	--
--	02	02		
Month: September			Module/Unit:	Sub-units planned
Lectures	Practicals	Total		
--	05	05		
Month: October			Module/Unit:	Sub-units planned
Lectures	Practicals	Total		
--	04	04		

Priya D. Patil

Name and Signature of Teacher

(Dr. Priya D. Patil)



P. Patil

Name and Signature of HoD

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Vivekanand College, Kolhapur (Autonomous)

Department of Botany
Annual Teaching Plan

Academic Year: 2024-2025

Name of the teacher: **Dr. Mrunalini Nilesh Desai**

Programme: **B. Sc. I**

Semester: **I**

Subject: **Botany**

Course Title: **"Basic in Botany" (DSC03BOT11)**

Month: August			Module/Unit:	Sub-units planned
Lectures	Practical	Total		
--	02	02	Practical-I	--
Month: September			Module/Unit:	Sub-units planned
--	04	04	Practical-I	--
Month: October			Module/Unit:	Sub-units planned
--	04	04	Practical-I	--

Name and Signature of Teacher

(*Dr. Mrunalini Desai*)



Name and Signature of HoD

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VIVEKANAND COLLEGE, KOLHAPUR
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Vivekanand College, Kolhapur (Autonomous)
Department of Botany
Annual Teaching Plan

Academic Year: 2024-2025

Name of the teacher: Dr. Mrunalini Nilesh Desai

Programme: B. Sc. II (Major)

Semester: III

Subject: Botany

Course Title: "Diversity of Cryptogams" (DSC-V: DSCBOT31)

Month: July			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit II: Fungi	Introduction, Habit (Types of mycellium), Mode of Nutrition. Methods of reproduction.
04	--	04		
Month: August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit II: Fungi	Outline of classification according to Alexopoulous and Mims (1979). Economic importance of Fungi.
04	--	04		
Month: September			Module/Unit:	Sub-units planned
04	--	04	Unit II: Fungi	<i>Rhizopus</i> - occurrence, plant body and life cycle <i>Puccinia</i> - occurrence, plant body and life cycle
Month: October			Module/Unit:	Sub-units planned
04		04	"Diversity of Phanerogams" (DSC-VI: DSCBOT32) Unit II:Gymnosperms	Introduction, Distribution in India, Methods of reproduction. Outline of classification according to Sporne(1965)



Name and Signature of Teacher
 (Dr. Mrunalini Desai)




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Vivekanand College, Kolhapur (Autonomous)
Department of Botany
Annual Teaching Plan

Academic Year: 2024-2025

Name of the teacher: **Dr. Mrunalini Nilesh Desai**

Programme: **B. Sc. II (Minor)**


Semester: **III**

Subject: **Botany** Course Title: **"Diversity in non flowering plants"(DSC-VI: DSCBOT32)**

Month: July			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit II: Fungi	Introduction, Habit (Types of mycellium), Mode of Nutrition. Methods of reproduction.
02	--	02		
Month: August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit II: Fungi	Outline of classification according to Alexopoulous and Mims (1979).
03	02	05		
Month: September			Module/Unit:	Sub-units planned
04	04	08	Unit II: Fungi	<i>Rhizopus</i> - occurrence, plant body and life cycle
Month: October			Module/Unit:	Sub-units planned
04	04	08	Unit II: Fungi	<i>Puccinia</i> - occurrence, plant body and life cycle Economic importance of Fungi.


 Name and Signature of Teacher
(Dr. Mrunalini N. Desai)




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Vivekanand College, Kolhapur (Autonomous)

Department of Botany
Annual Teaching Plan

Academic Year: 2024-2025

Name of the teacher: Dr. Mrunalini Nilesh Desai

Programme: B. Sc. II

Semester: III

Subject: Botany

Course Title: VSC-PR-II: "Bonsai and Terrarium" (VSC03BOT31)

Month: August			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Practical-I	--
--	02	02		
Month: September			Module/Unit:	Sub-units planned
--	04	04	Practical-I	--
Month: October			Module/Unit:	Sub-units planned
--	04	04	Practical-I	--

Name and Signature of Teacher

(Dr. Mrunalini N. Desai)



Name and Signature of HoD

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DEPARTMENT OF BOTANY
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Vivekanand College, Kolhapur (Autonomous)

Department of Botany

Annual Teaching Plan

Academic Year: 2024-2025

Name of the teacher: Dr. Mrunalini Nilesh Desai

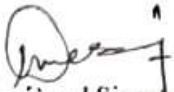
Programme: B. Sc. III

Semester: V


Subject: Botany

Course Title: "Cytology and Research Techniques in life sciences and Microbiology, Plant Pathology and Biofertilizers" (DSE7E1)

Month: July			Module/Unit:	Sub-units planned
04	--	04	Section II: Unit III: Study of Plant Diseases	Introduction, Cereals: Rust of Wheat
Month: August			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Section II: Unit III: Study of Plant Diseases	Cash crop: Red Rot of Sugarcane Legume: Wilt of Gram Spices: Leaf spot of Black Peeper
05	--	05		
Month: September			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit III: Study of Plant Diseases Unit II: Plant Pathology	Vegetable: Onion Smut Fruit: Apple Scab Classification of plant diseases based on pathogen, crops and symptoms.
05	--	05		
Month: October			Module/Unit:	Sub-units planned
04	--	04	Unit II: Plant Pathology	Study of mechanism of Infection in disease development, prevention and control of plant diseases. Role of Quarantine. Significance of Plant Pathology.


Name and Signature of Teacher
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Vivekanand College, Kolhapur (Empowered Autonomous)

Department of Botany
Annual Teaching Plan

Academic Year: 2024-2025

Name of the teacher: Dr. Snehal Sanjay Wadkar

Programme: B. Sc. I

Semester: I

Subject: Botany

Course Title: "Basic in Botany" (DSC03BOT11)

Month: August			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Practical-I	--
--	02	02		
Month: September			Module/Unit:	Sub-units planned
--	04	04	Practical-I	--
Month: October			Module/Unit:	Sub-units planned
--	04	04	Practical-I	--



Name and Signature of Teacher
(Dr. Snehal S. Wadkar)


Name and Signature of HoD
DEPARTMENT OF BOTANY
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Vivekanand College, Kolhapur (Empowered Autonomous)
Department of Botany
Annual Teaching Plan

Academic Year: **2023-2024**

Name of the teacher: **Dr. Snehal Sanjay Wadkar**


Programme: **B. Sc. II (Minor)**

Semester: **III**

Subject: **Botany** Course Title: **"Plant Taxonomy" (MIN 03BOT32)**

Month: July			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit I: Introductory Taxonomy	Introduction, Importance of Taxonomy
02	--	02		
Month: August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Unit I: Introductory Taxonomy	Functions of Taxonomy- Identification, Nomenclature, Classification, Ranks, Categories and Taxonomic groups.
03	02	05		
Month: September			Module/Unit:	Sub-units planned
04	04	08	Unit III: Tools for Taxonomic Studies	Herbarium- Introduction, Roles and Significance Botanical Gardens- Introduction, Role, Significance
Month: October			Module/Unit:	Sub-units planned
03	04	05	Unit III: Tools for Taxonomic Studies	Sir. J.C. Bose Botanical Garden, Calcutta, Kew Botanical Garden, Kew., Lead Botanical Garden, Shivaji University, Kolhapur.


 Name and Signature of Teacher
(Dr. Snehal S. Wadkar)


 Name and Signature of HoD
 DEPARTMENT OF BOTANY
 VIVEKANAND COLLEGE, KOLHAPUR
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Vivekanand College, Kolhapur (Empowered Autonomous)

**Department of Botany
Annual Teaching Plan**

Academic Year: **2024-2025**

Name of the teacher: **Dr. Snehal Sanjay Wadkar**

Programme: **B. Sc. II**

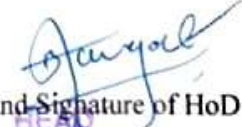
Semester: III

Subject: **Botany**

Course Title: **VSC-PR-II: "Bonsai and Terrarium" (VSC03BOT31)**

Month: August			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Practical-I	--
--	02	02		
Month: September			Module/Unit:	Sub-units planned
--	04	04	Practical-I	--
Month: October			Module/Unit:	Sub-units planned
--	04	04	Practical-I	--


Name and Signature of Teacher
(**Dr. Snehal S. Wadkar**)


Name and Signature of HoD
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DEPARTMENT OF BOTANY
VIVEKANAND COLLEGE, KOLHAPUR
(AUTONOMOUS)



Vivekanand College, Kolhapur (Empowered Autonomous)

Department of Botany
Annual Teaching Plan

Academic Year: 2023-2024

Name of the teacher: Dr. Snehal Sanjay Wadkar

Programme: B. Sc. III

Semester: V

Subject: Botany

Course Title: "Cytology and Research Techniques in life sciences and Microbiology, Plant Pathology and Biofertilizers" (DSE7E1)

"Plant Biochemistry and Stress Physiology & Plants Systematics and Paleobotany"
(DSE7E1)

Month: July			Module/Unit:	Sub-units planned
04	--	04	Section I: Unit III: Analytical Techniques in Plant Sciences	Principals of Microscopy - Light Microscopy, Fluorescence and Electron(TEM and SEM) Microscopy.
Month: August			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Section I: Unit III: Analytical Techniques in Plant Sciences	Chromatography Principals-Paper Chromatography, TLC, HPLC
05	03	08		
Month: September			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Section- I Unit II: Lipid Metabolism and Fatty acid metabolism	Introduction and Classification of Lipids, Properties of Fatty acids (Saturated Fatty acids, Unsaturated Fatty acids)
05	04	08		
Month: October			Module/Unit:	Sub-units planned
05	03	08	Section- I Unit II: Lipid Metabolism and Fatty acid metabolism	Beta oxidation, Gluconeogenesis and role in mobilization of fatty acids during germination, Significance of lipids.

Name and Signature of Teacher
(Dr. Snehal S. Wadkar)



Name and Signature of HoD
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VIVEKANAND COLLEGE, KOLHAPUR
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Vivekanand College, Kolhapur (Autonomous)
Department of Botany
Annual Teaching Plan

Academic Year: 2024-2025

Name of the teacher: Ms. Pradnya Baban Shelar

Programme: B. Sc. I Semester: I

Subject: Botany Course Title: "Basic in Botany" (DSC03BOT11)

Month: August			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit-I: Importance of Plant	<ul style="list-style-type: none"> ● Role of plants in human welfare (Direct and indirect), Role of plants in ecological services
02	--	02		
Month: August			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Unit-I: Importance of Plant	<ul style="list-style-type: none"> ● Evolutionary history of plants ● Study of Algae: <i>Nostoc</i>
04	02	06		
Month: September			Module/Unit:	Sub-units planned
04	04	08	Unit:II Study of following examples with reference to occurrence, plant body and life cycle	<ul style="list-style-type: none"> ● Study of Fungi: <i>Mucor</i> ● Study of Bryophyte: Moss
Month: October			Module/Unit:	Sub-units planned
04	04	08	Unit:II Study of following examples with reference to occurrence, plant body and life cycle	<ul style="list-style-type: none"> ● Study of Pteridophyte: <i>Pteris</i> ● Study of Gymnosperms: <i>Cycas</i>

Name and Signature of Teacher

(Ms. Pradnya B. Shelar)

Name and Signature of HoD

DEPARTMENT OF BOTANY
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Vivekanand College, Kolhapur (Autonomous)
Department of Botany
Annual Teaching Plan

Academic Year: 2024-2025

Name of the teacher: **Ms. Pradnya Baban Shelar**

Programme: **B. Sc. II (Open Elective)**

Semester: **III**

Subject: **Botany**

Course Title: **OEC03LFA11: Life Science-I Herbal Cosmetics-I**

Month: August			Module/Unit:	Sub-units planned
Lectures	Practicals	Total	Practical I	--
--	02	02		
Month: September			Practical I	--
Lectures	Practicals	Total		
--	04	04		
Month: October			Practical I	--
--	04	04		

Name and Signature of Teacher

(*Ms. Pradnya B. Shelar*)

Name and Signature of HoD

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Vivekanand College, Kolhapur (Autonomous)

Department of Botany

Annual Teaching Plan

Academic Year: 2024-2025

Name of the teacher: Ms. Pradnya Baban Shelar

Programme: B. Sc. III

Semester: V

Subject: Botany

Course Title: "Cytology and Research Techniques in life sciences and Microbiology, Plant Pathology and Biofertilizers" (DSE7E1)

Month: July			Module/Unit:	Sub-units planned
Lectures	Practical	Total	Section: I Unit: I Cell as a unit of Life	<ul style="list-style-type: none"> ● The cell theory, Prokaryotic and Eukaryotic cells, Cell size and shape. ● Cell membrane and cell wall
04	--	04		
Month: August			Module/Unit:	Sub-units planned
04	04	08	Section: I Unit: I Cell as a unit of Life	<ul style="list-style-type: none"> ● Models of membrane structure. ● The functions of membranes ● Cell cycle
Month: September			Module/Unit:	Sub-units planned
05	04	09	Section: I Unit: I Cell as a unit of Life Section: II Unit: I Microbiology, Plant Pathology and Biofertilizers	<ul style="list-style-type: none"> ● Apoptosis ● Methods of microbiology
Month: October			Module/Unit:	Sub-units planned
05	04	09	Section: II Unit: I Microbiology, Plant Pathology and Biofertilizers	<ul style="list-style-type: none"> ● Micro-organisms in biological world ● Scope of microbes in Industry and Environment

Name and Signature of Teacher

(Ms. Pradnya B. Shelar)



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